DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 13.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-009273

Address: 333 Burma Road **Date Inspected:** 28-Sep-2009

City: Oakland, CA 94607

OSM Arrival Time: 1500 **Project Name:** SAS Superstructure **OSM Departure Time:** 2330 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Oregon Iron Works Clackamas, Or. **Location:** Clackamas, OR

CWI Name: Steve Barnett **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Hinge-K Components

Summary of Items Observed:

Summary of Items Observed: On this date, Caltrans Quality Assurance Inspector (QA) Clete Henke was present at Oregon Iron Works, Inc. (OIW) in Clackamas, OR for observation of fabrication of the Hinge K Pipe Beams and related activities including in process welding and OIW Quality Control (QC) visual and nondestructive testing. The following observations were recorded:

OIW Fabrication Shop-Bay 3

Hinge-K Pipe Beam Base Assembly 102A-2:

a111-2 forging to a110-2 base plate

The QA Inspector intermittently monitored OIW welders Phuong Huynh (WID H4) he engaged in grinding at interior weld terminations in an attempt to achieve a 2:1 transition at these locations. Welder H4 was engaged in this activity for the duration of the shift.

OIW Fabrication Shop-Bay 6

Hinge-K Pipe Beam Fuse Assembly 120A-6:

a124-9 to a124-1

The QA Inspector intermittently observed OIW qualified welder Vincent Vu (WID V7) during in-process welding of Soudotape 316L stainless steel overlay to hinge k pipe beam fuse sub-assembly 120A-6. The weld joint is identified as 316L 2nd layer. Mr. Vu was observed welding in the flat position utilizing automatic electro slag welding (ESW) overlay process with a .5mm x 60mm Soudotape 316L stainless electrode, filler metal brand Soudotape class EQ316L automatic. An OIW helper was observed assisting welder S74 during ESW activity. The QA Inspector observed OIW QC Inspector Steve Barnett regularly monitoring and recording the in process ESW

WELDING INSPECTION REPORT

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parameters. The QA Inspector also intermittently observed in process welding parameters and determined that the ESW parameters (1200 amps, 25 volts, 267mm/min travel speed) and minimum preheat temperature of 70° F appeared to be in general compliance with the contract requirements and approved OIW Welding Procedure Specification (WPS) 7003.

Material, Equipment, and Labor Tracking:

The QA Inspector performed verification of personnel involved with this project and equipment in use. The QA Inspector accounted for 4 OIW production personnel and 2 Quality Control Inspectors present on this date during swing shift.



Summary of Conversations:

As noted in the body of the report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Henke,Clete	Quality Assurance Inspector
Reviewed By:	Adame,Joe	QA Reviewer